1. An electrosurgery system for treating tissue immersed in an electrically conductive fluid, comprising:-

a generator for delivering a radio frequency tissue treatment output in the frequency range of from 100 kHz to 50 MHz, and

an elongate instrument shaft configured to be mounted at a proximal end to a handpiece and carrying at its distal end a bipolar electrode assembly connected to the generator, wherein the electrode assembly includes:-

an active electrode with an active zone at a distal end of the active electrode; and

a return electrode with a return zone near the active zone;

wherein at least one of the active and return zones has an electrically insulating dielectric covering such that in use a radio frequency electrical circuit between the active and return electrodes through the conductive fluid is completed preliminary by dielectric coupling through the dielectric covering.

2. A system according to claim 1, wherein the return zone is adjacent and set back from the active zone in the proximal direction.

3. A system according to claim 1, wherein the insulating covering encases the return zone, and the active zone is exposed.

4. A system according to claim 1, wherein the frequency of operation of the generator and the construction of the electrode assembly are such that when a radio frequency current of 2 amps is delivered to the electrode assembly when immersed in normal saline, the current density at the outer surface of the dielectric covering does not exceed 50 mA/mm^2.

5. A system according to claim 1, wherein the frequency of operation of the generator and the construction of the electrode assembly are such that application of radio frequency power by the generator to the electrode assembly results in a

substantially uniform distribution of electric field over said return zone and a corresponding substantially uniform current density of said electric field.

6. A system according to claim 1, wherein both the active zone and the return zone are encased in respective insulative dielectric coverings so that said active zone is insulated from direct electrical contact with said tissue and said electrically conductive fluid and, in use, a circuit is completed between said active and return electrodes primarily by dielectric coupling through both coverings.

7. A system according to claim 6, wherein the frequency of operation of the generator and the construction of the electrode assembly are such that there is a substantially uniformly distribution of electric field over said active and return zones and a corresponding substantially uniform current density of said electric field.

8. A system according to claim 1, wherein the material of each dielectric covering is a low loss dielectric material.

9. A system according to claim 1, wherein each dielectric covering has a thickness greater than 50 μm.

10. A system according to claim 1, wherein each said dielectric covering is of sufficient thickness to result in a limited current density over said active and return zones so as to prevent significant power dissipation in any carbon tracking between said active and return zones during use of said electrode assembly.

11. A system according to claim 6, wherein said dielectric coverings over said return zone and said active zone both have a thickness greater than 50 μm .

12. A system as recited in claim 7, wherein said dielectric coverings over said return zone and said active zone both have a thickness less than 50 μm.

13. A system according to claim 1, wherein the insulating covering which covers the return zone has a first pre-determined thickness and wherein a remainder of the return electrode is coated with a second dielectric covering having a second pre-determined thickness greater than the first pre-determined thickness and capable of substantially preventing capacitive coupling of the said remainder of the return electrode to other instruments or to tissue within a body cavity.

14. A system according to claim 13, wherein the return zone is isolated from the remainder of the return electrode by an isolating transformer positioned between the return zone and the remainder of the return electrode.

15. A system according to claim 13, wherein the return zone is isolated from the said remainder of the return electrode by an isolating transformer positioned between the return zone and the said remainder of the return electrode.

16. A system according to claim 1, wherein both the active zone and the return zone are encased in respective insulative dielectric coverings, wherein the dielectric covering encasing the return zone has a first pre-determined thickness and wherein a remainder of the return electrode is coated with a third dielectric insulating material layer having a second pre-determined thickness greater than the first pre-determined thickness and capable of substantially preventing capacitive coupling of the said remainder of the return electrode to other instruments or to tissue within a body cavity.

17. A system according to claim 16, wherein the return zone is isolated from the said remainder of the return electrode by a common mode choke positioned between the return zone and the said remainder of the return electrode.

18. A system according to claim 16, wherein the return zone is isolated from the said remainder of the return electrode by an isolating transformer positioned between the return zone and the remainder of the return electrode.

19. A system according to claim 1, wherein the insulative covering encases the active zone.

20. A system according to claim 19, wherein the frequency of operation of the generator and the construction of the electrode assembly are such that when a radio frequency current of 2 amps is delivered to the electrode assembly when immersed in normal saline, the current density at the outer surface of the dielectric covering does not exceed 50 mA/mm^2

21. A system according to claim 19 or claim 20, wherein the active electrode is configured as at least one of a long needle and a wire and wherein the insulating covering on the active zone is of sufficient thickness that current density is limited over the active zone and the active electrode can operate power efficiently when partly enveloped within a vapour pocket during vaporisation.

22. An electrosurgical instrument for treating tissue immersed in an electrically conductive fluid with radio frequency energy in the frequency range of from 100 kHz to 50 MHz, wherein the instrument comprises an elongate shaft configured to be mounted at a proximal end to a handpiece and carrying at its distal end a bipolar electrode assembly which includes:-

an active electrode with an active zone at a distal end of the active electrode; and

a return electrode with a return zone near the active zone;

wherein at least one of the active and return zones has an electrically insulating dielectric covering such that in use a radio frequency electrical circuit between the active and return electrodes through the conductive fluid is completed at least primarily by dielectric coupling through the dielectric covering.

23. An instrument according to claim 22, wherein the return zone is adjacent and set back from the active zone in the proximal direction.

24. An instrument according to claim 22, wherein the insulating covering encases the return zone, and the active zone is exposed.

25. An instrument according to claim 22, wherein the electrode assembly is constructed such that, when an electrosurgical radio frequency current at at least one frequency in the said frequency range is delivered to the assembly when immersed in normal saline, the current density at the outer surface of the dielectric covering does not exceed $50mA/mm^2$.

26. An instrument according to claim 22, wherein the thickness of the or each dielectric covering is greater than 50μm.

27. An instrument according to claim 22, wherein the thickness of the or each dielectric covering is less than 50 μm.

28. An instrument according to claim 24, wherein said dielectric covering which covers the return zone has a first pre-determined thickness and wherein a remainder of the return electrode is coated with a second dielectric covering having a second pre-determined thickness greater than the first pre-determined thickness and capable of substantially preventing capacitive coupling of said remainder of the return electrode to other instruments or to tissue within a body cavity.

29. An instrument according to claim 28, wherein the return zone is isolated from said remainder of the return electrode by a common mode choke positioned between the return zone and said remainder of the return electrode.

30. An instrument according to claim 28, wherein the return zone is isolated from said remainder of the return electrode by an isolating transformer positioned between the return zone and said remainder of the return electrode.

31. An instrument according to claim 22, wherein both the active zone and the return zone are encased in respective insulative dielectric coverings, wherein the dielectric covering encasing the return zone has a first pre-determined thickness and wherein a remainder of the return electrode is coated with a third dielectric insulating material layer having a second pre-determined thickness greater than the first pre-determined thickness and capable of substantially preventing capacitive coupling of said remainder of the return electrode to other instruments or to tissue within a body cavity.

32. An instrument according to claim 22, wherein the dielectric covering encases the active zone.

33. An instrument according to claim 32, wherein the active electrode is configured as a long needle or wire and wherein the insulating covering on the active zone is of sufficient thickness that current density is limited over the active zone and the active electrode can operate power efficiently when partly enveloped within a vapour pocket during vaporisation.

34. An instrument according to claim 32, wherein the active electrode comprises a ceramic body defining an internal cavity which cavity is lined with metal, the ceramic body having an outer tissue or fluid contact surface.

35. An instrument according to claim 32, wherein the return zone is covered with an insulative dielectric outer layer having an outer fluid contact surface.

36. An electrosurgical instrument for use at a frequency or frequencies in the range of from 100kHz to 50 MHz, the instrument having a bipolar electrode assembly for tissue treatment when immersed in a conductive fluid, wherein the instrument comprises an elongate shaft mounted at one end to a handpiece, and carrying the electrode assembly at its other end, and wherein the electrode assembly comprises at

least one distal active electrode, and an adjacent return electrode set back proximally of the active electrode, the return electrode being encased in an insulative dielectric layer.

37. A laparoscopic electrosurgical instrument for wet field electrosurgery, wherein the instrument comprises a tubular elongate shaft for insertion into a body cavity and, at the end of the shaft for insertion into the body cavity, an electrode assembly comprising a first conductor at an extreme distal end of the instrument and a second conductor insulated from the first conductor and set back from the distal end, wherein at least the second conductor is encased in an insulative outer dielectric layer.

38. An electrosurgical system for treating tissue structure contained within a body cavity and immersed in an electrically conductive fluid, said system comprising:

a generator for delivering a radio frequency output for the treatment of tissue structures in the high to very high frequency range; and

an electrode assembly connected to said generator, said electrode assembly comprising:

an active electrode including an active zone at a distal end of said active electrode;

a return electrode including a return zone defined by an electric field developed between said active electrode and said return electrode when said electrode assembly is connected to said radio frequency output of said generator; and

an insulator separating said return electrode from said active electrode; said return zone being coated with a layer of dielectric insulating material wherein, in use, said return zone is insulated from direct electrical contact with said tissue and said electrically conductive fluid so that an electrical circuit is completed between said active and return zones by dielectric coupling through said dielectric insulating material.

39. An electrode assembly for treating tissue structure contained within a body cavity and immersed in an electrically conductive fluid, said electrode assembly being connected to a generator for delivering a radio frequency output for the treatment of

tissue structures in the high to very high frequency range, said electrode assembly comprising:

an active electrode including an active zone at a distal end of said active electrode;

a return electrode including a return zone defined by an electric field developed between said active electrode and said return electrode when electrode assembly is connected to said radio frequency output of said generator; and

an insulator separating said return electrode from said active electrode;

said return zone being coated with a dielectric insulating material layer wherein, in use, said return zone is insulated from direct electrical contact with said tissue and said electrically conductive fluid so that an electrical circuit is completed between said active and return zones by dielectric coupling through said dielectric insulating material.

40. An electrode assembly for treating tissue structure contained within a body cavity and immersed in an electrically conductive fluid, said electrode assembly being connected to a generator for delivering a radio frequency output to said electrode assembly, said electrode assembly comprising:

an active electrode in the form of a ceramic cavity lined internally with metal, said active electrode including an active zone at a distal end of said active electrode; and

a return electrode including a return zone defined by an electric field developed between said active electrode and said return electrode when said electrode is connected to said radio frequency output of said generator;

said ceramic cavity being a dielectric insulating material, wherein, in use, an electrical circuit is completed between said active and return zones by dielectric coupling.